

November 30, 2004

Exemption No. 6632F
Regulatory Docket No. FAA-2001-8744

Mr. Penn R. Stohr
Director of Operations
Evergreen Aviation Museum
3850 Three Mile Lane
McMinnville, OR 97128

Dear Mr. Stohr:

We are pleased to inform you that we have granted your petition to extend Exemption No. 6632, as amended. This letter explains the basis for our decision and describes its effect.

The Basis for our Decision

By letter dated July 15, 2004, you petitioned the Federal Aviation Administration (FAA) on behalf of Evergreen Aviation Museum (Evergreen) for an extension of Exemption No. 6632, as amended. That exemption from §§ 91.315, 91.319(a), 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations permits Evergreen to operate its Boeing B-17 (B-17) aircraft, Serial No. 44-83785, and its Grumman TBM-3E Avenger Torpedo Bomber (TBM-3E), Serial No. 91726, which hold a limited category airworthiness certificate for the purpose of carrying passengers on local flights in return for donations.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Evergreen.

The FAA has determined that the justification for the issuance of Exemption No. 6632, as amended, remains valid with respect to this exemption and is in the public interest. Therefore, under the authority provided by 49 U.S.C. 40113 and 44701 which the FAA Administrator has delegated to me, I grant your petition subject to the conditions and limitations listed below.

Conditions and Limitations

1. Evergreen must maintain its airplanes (those listed in Condition No. 24), in accordance with the—
 - a. Maintenance requirements as specified in the specific former U.S. military airplane (those listed in Condition No. 24) type specification sheet, as amended;
 - b. FAA-approved maintenance inspection program that meets the requirements of § 91.409(f)(4) and (g); and
 - c. Appropriate former U.S. military airplane's military technical manuals (those listed in Condition No. 24).
2. The pilot in command (PIC) must—
 - a. Hold at least a commercial pilot certificate with a multiengine airplane rating, an airplane instrument rating, and the appropriate type rating in the specific former U.S. military airplane (those listed in Condition No. 24);
 - b. Have completed within the previous 12 calendar months, Evergreen's PIC qualification and recurrent flight and ground training program in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which PIC privileges are sought;
 - c. Have completed within the previous 12 calendar months, Evergreen's PIC proficiency check in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which PIC privileges are sought;
 - d. Have at least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine airplanes, and 25 hours in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24); or have at least a total of 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine airplanes, and 100 hours and 50 takeoffs and 50 landings in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24); and

- e. Have accomplished within the previous 90 days, three takeoffs and three landings to a full stop in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which PIC privileges are sought. For initial PIC qualification in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24), or if the pilot has allowed his/her takeoff and landing currency to lapse in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24), the takeoff and landing currency may not be accomplished during passenger-carrying operations.
3. The second in command (SIC) must—
- a. Hold at least a commercial pilot certificate with a multiengine airplane rating and an airplane instrument rating;
 - b. Have completed within the previous 12 calendar months, Evergreen's SIC qualification and recurrent flight and ground training program in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which SIC privileges are sought;
 - c. Have completed within the previous 12 calendar months, Evergreen's SIC proficiency check in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which SIC privileges are sought;
 - d. Have at least a total of 1,500 hours of aeronautical flight experience and 250 hours of aeronautical flight experience in multiengine airplanes; or have at least a total of 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in multiengine airplanes, and 25 hours and 10 takeoffs and 10 landings in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24); and
 - e. Have accomplished within the previous 90 days, three takeoffs and three landings to a full stop in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for which SIC privileges are sought. For initial SIC qualification in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24), or if the pilot has allowed his/her takeoff and landing currency to lapse in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24), the takeoff and landing currency may not be accomplished during passenger-carrying operations.
4. Evergreen must develop and maintain a written qualification and recurrent ground training program in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for its PICs and SICs that covers the training subjects listed below. Each PIC and SIC must receive the following training and iterations of training within the previous 12 calendar months prior to serving in a PIC or SIC position in the

appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for Evergreen:

REQUIRED TRAINING TASKS	ITERATIONS
a. General information and description of the airplane;	1
b. Aircraft limitations;	1
c. Aircraft servicing;	1
d. Airspeeds;	1
e. Fuel system;	1
f. Electrical system;	1
g. Hydraulic system;	1
h. Engines;	1
i. Instruments and avionics;	1
j. Landing gear, brakes, controls, and flaps systems;	1
k. Propeller;	1
l. Emergency procedures, including—	1
(i) Instruction in emergency assignments and procedures, including coordination among crewmembers;	1
(ii) Individual instruction in the location, function, and operation of emergency equipment, including—	1
A. First aid equipment and its proper use; and	1
B. Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires;	1
(iii) Instruction in the handling of emergency situations, including—	1
A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and	1
B. Illness, injury, or other abnormal situations involving passengers or crewmembers;	1
m. Weight and balance;	1
n. Performance planning; and	1
o. Airplane's checklist.	1

5. Evergreen must develop and maintain a written qualification and recurrent flight training program for the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for its PICs that covers the areas of operations, tasks, and iterations as listed in the following table of training tasks. Each PIC must successfully accomplish this training before being assigned PIC responsibilities and duties. Each PIC must receive and successfully accomplish the following training and iterations of training within the previous 12 calendar months prior to serving in a PIC position in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for Evergreen:

REQUIRED TRAINING TASKS	ITERATIONS
a. Preflight Preparation	1
(i) Aircraft exam (oral or written)	1
(ii) Aircraft performance & limitations (oral or written)	1
b. Ground Operations	4
(i) Preflight inspection	4
(ii) Cockpit resource management	4
(iii) Powerplant start procedures	4
(iv) Taxiing	4
(v) Pre-takeoff checks	4
c. Takeoffs & Departures	3
(i) Normal & crosswind takeoffs	3 within the previous 90 days
(ii) Powerplant failure	3
(iii) Rejected takeoffs	3
d. In-flight Maneuvers	4
(i) Steep turns	4
(ii) Approach to stalls	4
(iii) Powerplant failure	4
(iv) Specific flight characteristics	4
e. Landings & Approaches to Landing	3
(i) Normal & crosswind approaches & landing	3 within the previous 90 days
(ii) Maneuvering to a landing with a simulated powerplant failure	3
(iii) Rejected landing	3
(iv) Landing from a no flap or a nonstandard flap approach	3
f. Normal & Abnormal Procedures	3
(i) Powerplant	3
(ii) Fuel system	3
(iii) Electrical system	3
(iv) Hydraulic system	3
(v) Environmental & pressurization system (as appropriate and if equipped)	3
(vi) Fire detection & extinguishing system	3
(vii) Navigation & avionics system	3
(viii) Automatic flight control system, electronic flight instrument system, & related systems (as appropriate and if equipped)	3
(ix) Flight Control System	3
(x) Anti-ice & de-ice System	3
(xi) Aircraft & personal emergency equipment	3

g. Emergency Procedures	2
(i) In-flight fire & smoke removal	2
(ii) Rapid decompression (as appropriate and if equipped with a pressurization system)	2
(iii) Emergency descent	2
(iv) Ditching	2
(v) Emergency Evacuation	2
h. Postflight Procedures	
(i) After landing procedures	4
(ii) Parking and securing aircraft	4

6. Evergreen must develop and maintain a written qualification and recurrent flight training program for the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for its SICs that covers the areas of operations, tasks, and iterations as listed in the following table of training tasks. Each SIC must successfully accomplish this training before being assigned SIC responsibilities and duties. Each SIC must receive and successfully accomplish the following training and iterations of training within the previous 12 calendar months prior to serving in an SIC position in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for Evergreen:

REQUIRED TRAINING TASKS	ITERATIONS
a. Operational procedures applicable to the powerplant, equipment, and systems.	1
b. Performance specifications and limitations.	1
c. Normal, abnormal, and emergency operating procedures.	1
d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls.	3 in the previous 90 days
e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC.	1
f. Crew resource management training.	1
g. Familiarization with the aircraft flight manual, placards, and markings.	1

7. Each PIC must successfully accomplish a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial and recurrent qualification training program). The proficiency practical test must cover the areas of operations and tasks listed below in the following “REQUIRED TESTING TASKS” table. Each PIC must be found competent and proficient by the Portland Flight Standards District Office (ANM FSDO No. 9) (or by a procedure that has been approved by the ANM FSDO No. 9) on those areas of operation and tasks before being assigned PIC duties and responsibilities

in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for Evergreen:

REQUIRED TESTING TASKS	ITERATIONS
a. Preflight Preparation	
(i) Aircraft exam (oral or written)	1
(ii) Aircraft performance & limitations (oral or written)	1
b. Ground Operations	
(i) Preflight inspection	1
(ii) Cockpit resource management	1
(iii) Powerplant start procedures	1
(iv) Taxiing	1
(v) Pre-takeoff checks	1
c. Takeoffs & Departures	
(i) Normal & crosswind takeoffs	1
(ii) Powerplant failure	1
(iii) Rejected takeoffs	1
d. In-flight Maneuvers	
(i) Steep turns	1
(ii) Approach to stalls	1
(iii) Powerplant failure	1
(iv) Specific flight characteristics	1
e. Landings & Approaches to Landing	
(i) Normal & crosswind approaches & landing	1
(ii) Maneuvering to a landing with a simulated powerplant failure	1
(iii) Rejected landing	1
(iv) Landing from a no flap or a nonstandard flap approach	1
f. Normal & Abnormal Procedures	
(i) Powerplant	1
(ii) Fuel system	1
(iii) Electrical system	1
(iv) Hydraulic system	1
(v) Environmental & pressurization system (as appropriate and if equipped)	1
(vi) Fire detection & extinguishing system	1
(vii) Navigation & avionics system	1
(viii) Automatic flight control system, electronic flight instrument system, & related systems (as appropriate and if equipped)	1
(ix) Flight Control System	1
(x) Anti-ice & de-ice System	1
(xi) Aircraft & personal emergency equipment	1
g. Emergency Procedures	

(i) In-flight fire & smoke removal	1
(ii) Rapid decompression (as appropriate and if equipped with a pressurization system)	1
(iii) Emergency descent	1
(iv) Ditching	1
(v) Emergency Evacuation	1
h. Postflight Procedures	
(i) After landing procedures	1
(ii) Parking and securing aircraft	1

8. Each SIC must accomplish a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial and recurrent qualification training program). The proficiency practical test must cover the areas of operations and tasks listed in the following “REQUIRED TESTING TASKS” table. Each SIC must be found competent and proficient by the ANM FSDO No. 9 (or by a procedure that has been approved by ANM FSDO No. 9) on those areas of operation and tasks before being assigned SIC duties and responsibilities in the appropriate airplane of the specific former U.S. military airplane (those listed in Condition No. 24) for Evergreen:

REQUIRED TESTING TASKS	ITERATIONS
a. Operational procedures applicable to the powerplant, equipment, and systems.	1
b. Performance specifications and limitations.	1
c. Normal, abnormal, and emergency operating procedures.	1
d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls.	1
e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC.	1
f. Crew resource management training.	1
g. Familiarization with the aircraft flight manual, placards, and markings.	1

9. Evergreen must document and record all ground and flight training and/or testing required by this grant of exemption in a manner acceptable to the ANM FSDO No. 9. That documentation and records must contain the following information:
- a. Date of each training session.
 - b. Date of each testing session.
 - c. The amount of time of each session of ground and flight training given.

- d. The amount of time of each session of ground and flight testing given.
 - e. Location where each session of ground and flight training was given.
 - f. Location where each session of ground and flight testing was given.
 - g. The aircraft identification number in which each flight training session was received in.
 - h. The aircraft identification number in which each flight testing session was received in.
 - i. The name and certificate number of the pilot who provided each session of training.
 - j. The name and certificate number of the pilot who provided each session of testing.
 - k. The signature and printed name of the pilot who received the training. That pilot's signature will serve as a verification of having received each session of training.
 - l. The signature and printed name of the pilot who received the training. That pilot's signature will serve as a verification of having received each session of testing.
10. When requested, the Evergreen's PIC and SIC qualification and recurrent ground- and flight-training programs and/or records listed in condition Nos. 4, 5, 6, and 9, must be made available to ANM FSDO No. 9, 1800 N.E. 25th Avenue, Suite 15, Hillsboro, Oregon 97124, (503) 681-5500.
11. Evergreen must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
12. Evergreen will maintain the following information and records and will make those records available for review to the FAA when requested:
- a. The name of each pilot crewmember Evergreen authorizes to conduct flight operations in its airplanes under the terms of this exemption;
 - b. Copies of each PIC's and SIC's pilot certificate, medical certificate, qualifications, and initial and recurrent training and testing documentation to comply with Condition Nos. 2, 3, 7, 8, and 9; and
 - c. Records of maintenance performed and maintenance inspection records to comply with Condition No. 1.

13. Evergreen shall notify ANM FSDO No. 9 within 24 hours of any of the following occurrences by written report, by electronic mail, or by facsimile:
 - a. Each in-flight fire in any system or area that requires activation of any fire suppression system or discharge of a portable fire extinguisher.
 - b. Each exhaust system component failure, including the turbocharger components that causes damage to any engine, structure, cowling, or components.
 - c. Each aircraft component or system that causes, during flight, accumulation or circulation of noxious fumes, smoke, or vapor in any portion of the cabin or crew area.
 - d. Except for training, each occurrence of engine shutdown or propeller feathering, and the reason for such shutdown or feathering.
 - e. Each failure of the propeller governing systems or feathering systems.
 - f. Any landing gear system or component failures or malfunctions, which require use of emergency or standby extension systems.
 - g. Each failure or malfunction of the wheel brake systems that cause loss of brake control on the ground.
 - h. Each aircraft structure that requires major repair due to damage, deformation, or corrosion, and the method of repair.
 - i. Each failure or malfunction of the fuel system, tanks, pumps, or valves.
 - j. Each malfunction, failure, or defect in any system or component that requires taking emergency action of any type during the course of any flight.
 - k. For the purpose of this section, "during flight" means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.
14. Before permitting a person to be carried on board the airplane for the purposes authorized under this exemption, Evergreen will inform that person that this aircraft holds only a special airworthiness certificate. Evergreen must explain the significance of the special airworthiness certificate as compared to a standard airworthiness certificate and that the FAA has authorized this flight under a grant of exemption from the requirements of §§ 91.315, 91.319(a), 119.5(g), and 119.21(a). The explanation of the significance of a special airworthiness certificate as compared to a standard airworthiness certificate must include at least the following information:

- a. The FAA has not established nor has it approved limited or experimental category airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.
 - b. An aircraft may be issued an experimental airworthiness certificate for the purpose of exhibition when the aircraft is intended only for exhibition of the aircraft's flight capabilities, performance, or unusual characteristics at airshows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including (for persons exhibiting the aircraft) flying to and from such airshows and productions.
 - c. Limited category airworthiness certificated aircraft are issued when the FAA finds the aircraft has been previously issued a limited category type certificate and the aircraft conforms to that type of certificate and is in a good state of preservation and repair and is in a safe operating condition.
 - d. Standard category airworthiness certificates are issued for an aircraft when the FAA finds the aircraft had been manufactured and maintained in accordance with that aircraft's type certificate standards as established by the FAA, and the aircraft's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
15. All flight operations must be conducted—
- a. At a minimum operating altitude of not less than 1,000 feet above ground level (AGL);
 - b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;
 - c. With a minimum flight visibility of not less than 5 statute miles;
 - d. With a minimum ceiling of not less than 2,000 feet AGL;
 - e. Within a 50-nautical-mile radius of the departure airport with landing only permitted at that departure airport; and
 - f. At an airport that has a fire station or fire-fighting services available or within close proximity of the airport.

16. No persons other than the assigned flight crewmembers may be permitted on the flight deck of the airplane during flight operations.
17. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of approved seats in the aircraft.
18. Except for an emergency locator transmitter, Evergreen's airplanes (those listed in Condition No. 24) must have the equipment listed in § 91.205(b) and that equipment must be in an operable condition during the flight.
19. If the airplane is to be operated over water and beyond the power-off gliding distance from shore, Evergreen's airplanes (those listed in Condition No. 24) must have the equipment listed in § 91.205(b)(12) and that equipment must be in an operable condition during the flight.
20. Evergreen must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a § 501(c)(3) nonprofit, tax-exempt, charitable organization under §§ 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.
21. Evergreen must notify ANM FSDO No. 9 at least 5 working days (Mondays through Fridays) before conducting any PIC or SIC initial or recurrent qualification training and any PIC or SIC initial or recurrent proficiency checks required to be conducted under the terms of this grant of exemption.
22. No later than 72 hours prior to commencing flight operations under the terms of this grant of exemption, Evergreen must notify the jurisdictional FAA FSDO where it intends to conduct the flight operations and shall provide a copy of this exemption to that jurisdictional FAA FSDO.
23. Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or revocation of Exemption No. 6632, as amended.

24. Under this exemption, the Evergreen may operate only the following U.S.-manufactured former military airplanes:

Boeing B-17; Serial No. 44-83785

Grumman TBM-3E Avenger Torpedo Bomber; Serial No. 91726

The Effect of our Decision

Our decision extends the termination date of Exemption No. 6632, as amended, to November 30, 2006, for the B-17 and TBM-3E aircraft, unless sooner superseded or rescinded.

This letter must be attached to, and is a part of, Exemption No. 6632.

Sincerely,

/s/

John M. Allen

Acting Director, Flight Standards Service